

SEQUENCE LISTING

<110> MIYAWAKI, Atsushi
KARASAWA, Satoshi

<120> CHROMOPROTEIN

<130> P26359

<140> U.S. 10/516,317

<141> 2004-12-10

<150> JP2002/168583

<151> 2002-06-10

<150> U.S. National Phase of PCT/JP03/07336

<151> 2003-06-10

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<170> PatentIn version 3.3

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Lys	Pro	Tyr	Glu	Gly	Thr	Gln	Met	Glu	Asn	Ile	Lys	Val	Thr	Lys	Gly
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Gly	Pro	Leu	Pro	Phe	Ser	Phe	Asp	Ile	Leu	Thr	Pro	Asn	Cys	Gln	Tyr
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Gly	Ser	Val	Ala	Ile	Thr	Lys	Tyr	Thr	Ser	Gly	Ile	Pro	Asp	Tyr	Phe
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P26359.ST25.txt

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Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
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Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
      130                      135                      140

Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
      145                      150                      155                      160

Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
      165                      170                      175

Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
      180                      185                      190

His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
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Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
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Gly	Thr	Val	Asn	Asn	His	His	Phe	Met	Cys	Glu	Ala	Glu	Gly	Glu	Gly
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P26359.ST25.txt

Lys	Pro	Tyr	Glu	Gly	Thr	Gln	Met	Glu	Asn	Ile	Lys	Val	Thr	Lys	Gly
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Gly	Pro	Leu	Pro	Phe	Ser	Phe	Asp	Ile	Leu	Thr	Pro	Asn	Cys	Gln	Leu
	50					55					60				
Gly	Ser	Val	Ala	Ile	Thr	Lys	Tyr	Thr	Ser	Gly	Ile	Pro	Asp	Tyr	Phe
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Lys	Gln	Ser	Phe	Pro	Glu	Gly	Phe	Thr	Trp	Glu	Arg	Thr	Thr	Ile	Tyr
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Glu	Asp	Gly	Ala	Tyr	Leu	Thr	Thr	Gln	Gln	Glu	Thr	Lys	Leu	Asp	Gly
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Asn	Cys	Leu	Val	Tyr	Asn	Ile	Lys	Ile	Leu	Gly	Cys	Asn	Phe	Pro	Pro
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Ala	Leu	Lys	Cys	Ala	Asp	Gly	Asn	His	Leu	Thr	Cys	His	Leu	Arg	Thr
				165					170					175	
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			180					185					190		
His	Phe	Ser	Asp	His	Arg	Pro	Glu	Ile	Val	Lys	Val	Ser	Glu	Asn	Gly
		195					200					205			
Thr	Leu	Phe	Glu	Gln	His	Glu	Ser	Ser	Val	Ala	Arg	Tyr	Cys	Gln	Thr
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Cys Pro Ser Lys Leu Gly His Asn
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aactgccaac ttggaagcgt agccataacc aagtatacat cagggattcc agactacttt 240
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25

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Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
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Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Met
 50 55 60

Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
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Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
 85 90 95

Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
 100 105 110

Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
 115 120 125

Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
 130 135 140

Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
 145 150 155 160

Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
 165 170 175

Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
 180 185 190

His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
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Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr

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Cys Pro Ser Lys Leu Gly His Asn
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atagtgaagg tttcagagaa cggcacacta tttgaacagc acgaaagttc agtggccagg      660
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Lys Pro Tyr Glu Gly Thr Gln Met Leu Asn Ile Lys Val Thr Lys Gly
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Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Met
50 55 60

Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Gly
65 70 75 80

Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
85 90 95

Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
100 105 110

Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
115 120 125

Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
130 135 140

Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
145 150 155 160

Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
165 170 175

Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
180 185 190

His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
195 200 205

P26359.ST25.txt

Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
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Cys Pro Ser Lys Leu Gly His Asn
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Met Ala Ser Lys Ile Ser Asp Asn Val Arg Ile Lys Leu Tyr Met Glu

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Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
35              40              45
Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Phe
50              55              60
Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
65              70              75              80
Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
85              90              95
Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
100             105             110
Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
115             120             125
Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
130             135             140
Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
145             150             155             160
Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
165             170             175
Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
180             185             190
His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly

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Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
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Cys Pro Ser Lys Leu Gly His Asn
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Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
 35 40 45

Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln His
 50 55 60

Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
 65 70 75 80

Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
 85 90 95

Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
 100 105 110

Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
 115 120 125

Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
 130 135 140

Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
 145 150 155 160

Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
 165 170 175

Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
 180 185 190

P26359.ST25.txt

His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
 195 200 205

Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
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Cys Pro Ser Lys Leu Gly His Asn
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Gly	Thr	Val	Asn	Asn	His	His	Phe	Met	Val	Glu	Ala	Glu	Gly	Glu	Gly
			20					25					30		

Lys	Pro	Tyr	Glu	Gly	Thr	Gln	Met	Glu	Asn	Ile	Lys	Val	Thr	Lys	Gly
		35					40					45			

Gly	Pro	Leu	Pro	Phe	Ser	Phe	Asp	Ile	Leu	Thr	Pro	Asn	Cys	Gln	Met
	50					55					60				

Gly	Ser	Val	Ala	Ile	Thr	Lys	Tyr	Thr	Ser	Gly	Ile	Pro	Asp	Tyr	Phe
65					70					75					80

Lys	Gln	Ser	Phe	Pro	Glu	Gly	Phe	Thr	Trp	Glu	Arg	Thr	Thr	Ile	Tyr
				85					90					95	

Glu	Asp	Gly	Ala	Tyr	Leu	Thr	Thr	Gln	Gln	Glu	Thr	Lys	Leu	Asp	Gly
			100					105					110		

Asn	Cys	Leu	Val	Tyr	Asn	Ile	Lys	Ile	Leu	Gly	Cys	Asn	Phe	Pro	Pro
		115					120					125			

Asn	Gly	Pro	Val	Met	Gln	Lys	Lys	Thr	Gln	Gly	Trp	Glu	Pro	Ser	Cys
	130					135					140				

Glu	Met	Arg	Tyr	Thr	Arg	Asp	Gly	Val	Leu	Cys	Gly	Gln	Thr	Leu	Met
145					150					155					160

Ala	Leu	Lys	Cys	Ala	Asp	Gly	Asn	His	Leu	Thr	Cys	His	Leu	Arg	Thr
				165					170					175	

Thr	Tyr	Arg	Ser	Lys	Lys	Ala	Ala	Lys	Ala	Leu	Gln	Met	Pro	Pro	Phe
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180

185

190

His Phe Ser Asp His Arg Leu Glu Ile Val Lys Val Ser Glu Asn Gly
 195 200 205

Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
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Cys Pro Ser Lys Leu Gly His Asn
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